

1. In a quiz, positive marks are given for correct answers and negative marks are given for incorrect answers. If Jack's scores in five successive rounds were 25, - 5, - 10, 15 and 10, what was his total at the end?

(a) 45

(c) 35

(b) 25

(d) 15

2. At Washington temperature was  $-5^{\circ}\text{C}$  on Monday and then it dropped by  $2^{\circ}\text{C}$  on Tuesday. What was the temperature of Washington on Tuesday?

(a)  $-7^{\circ}\text{C}$

(c)  $-6^{\circ}\text{C}$

(b)  $-5^{\circ}\text{C}$

(d)  $-4^{\circ}\text{C}$

3. Write down a pair of integers whose sum is -3.

(a)  $(-1)+(-2)$

(c)  $1.5+1.5$

(b)  $(-1.5)+(-1.5)$

(d)  $(-1/2)+(-5/2)$

4. Find the following product:

$$(-18) \times (-10) \times 9$$

(a) 2130

(c) 1430

(b) 1620

(d) 2220

5. In a class test containing 15 questions, 4 marks are given for every correct answer and (-2) marks are given for every incorrect answer. Mark attempts all questions but only 9 of his answers are correct. What is his total score?

(a) 24

(c) 14

(b) 36

(d) 21

6. A cement company earns a profit of \$8 per bag of white cement sold and a loss of \$5 per bag of grey cement sold. The company sells 3,000 bags of white cement and 5,000 bags of grey cement in a month. What is its profit or loss?

(a) \$1800 profit

(c) \$1000 loss

(b) \$2000 profit

(d) \$1200 loss

7. A shopkeeper earns a profit of \$1 by selling one pen and incurs a loss of 40 cents per pencil while selling pencils of her old stock. In a particular month she incurs a loss of \$5. In this period, she sold 45 pens. How many pencils did she sell in this period?

(a) 126

(c) 125

(b) 124

(d) 123

8. Ronald solved  $\frac{2}{7}$  part of an exercise while Seema solved  $\frac{4}{5}$  of it. Who solved lesser part?

(a) Ronald

(c) Seema

(b) Both are equal

(d) None of these

9. Arrange the following in descending order:

$$\frac{2}{9}, \frac{2}{3}, \frac{8}{21}$$

(a)  $\frac{2}{9}, \frac{2}{3}, \frac{8}{21}$

(c)  $\frac{2}{9}, \frac{8}{21}, \frac{2}{3}$

(b)  $\frac{8}{21}, \frac{2}{9}, \frac{2}{3}$

(d)  $\frac{2}{3}, \frac{8}{21}, \frac{2}{9}$

10. James wants to put a picture in a frame. The picture is  $\frac{38}{5}$  cm wide. To fit in the frame, the picture cannot be more than  $\frac{73}{10}$  cm wide. How much should the picture be trimmed?

(a)  $\frac{4}{10}$  cm

(c)  $\frac{3}{10}$  cm

(b)  $\frac{3}{8}$  cm

(d)  $\frac{2}{9}$  cm

11. Which is greater?

$\frac{2}{7}$  of  $\frac{3}{4}$  or  $\frac{3}{5}$  of  $\frac{5}{8}$

(a)  $\frac{3}{5}$  of  $\frac{5}{8}$

(c) Both of them

(b)  $\frac{2}{7}$  of  $\frac{3}{4}$

(d) None of these

12. How much is 28 km less than 42.6 km?

(a) 15.3 km

(c) 16.3 km

(b) 14.6 km

(d) 12.3 km

13. A two-wheeler covers a distance of 55.3 km in one litre of petrol. How much distance will it cover in 10 litres of petrol?

(a) 810 km

(c) 100 km

(b) 178 km

(d) 553 km

14. Find the average of 4.2, 3.8 and 7.6.

(a) 6.2

(c) 5.2

(b) 2.3

(d) 2.6

15. Each side of a regular polygon is 2.5 cm in length. The perimeter of the polygon is 12.5cm. How many sides does the polygon have?

(a) 5 sides

(c) 7 sides

(b) 2 sides

(d) 4 sides

16. The rainfall (in mm) in a city on 7 days of a certain week was recorded as follows:

Day	Mon	Tue	Wed	Thurs	Fri	Sat	Sun
Rainfall (in mm)	0.0	12.2	2.1	0.0	20.5	5.5	1.0

Find the range of the rainfall in the above data.

- (a) 13.8  
(b) 20.5  
(c) 10.8  
(d) 15.3

17. By coincidence, Moriah's Obedience School trained the same number of dogs and cats last week. The school teaches dogs in groups of 6 and cats in groups of 2. What is the smallest number of cats the school could have had?

- (a) 7  
(b) 5  
(c) 6  
(d) 8

18. Isabelle is planting 16 bushes and 20 trees in rows. If she wants all the rows to be exactly the same, with no plants left over, what is the greatest number of rows Isabelle can plant?

(a) 4 rows

(c) 5 rows

(b) 8 rows

(d) 3 rows

19. With flu season coming up, Tremaine decides to make get-well-soon kits. He has 14 cans of chicken soup and 20 boxes of tissue, which he wants to use to make identical kits with no materials left over. What is the greatest number of get-well-soon kits Tremaine can make?

(a) 6 kits

(c) 3 kits

(b) 5 kits

(d) 2 kits

20. Curtis goes hiking every 12 days and swimming every 11 days. He did both kinds of exercise today. How many days from now will he go both hiking and swimming again?

(a) 128

(c) 132

(b) 126

(d) 129

21. How do you write  $2.89 \times 10^4$  in standard form?

(a) 289000

(c) 2890

(b) 28900

(d) 289

22. Regina has received a pet rabbit from her neighbor Rodney who is about to move to an apartment that does not allow pets. Her father is going to help her build a run for the rabbit in their back yard, but he wants Regina to design it. Regina sits down to think about the possibilities. Her father says that the run must be rectangular with whole number dimensions. If they want to enclose 48 square feet, how many options do they have?

(a) 1 ways

(c) 7 ways

(b) 8 ways

(d) 5 ways

23. Write the following statements in the form of equations:

**If you subtract 5 from 6 times a number, you get 7.**

(a)  $7x+5=6$

(c)  $6x-5=7$

(b)  $6x+5=7$

(d)  $7x-5=6$



24. Oman's father's age is 5 years more than three times Oman's age. Oman's father is 44 years old. Set up an equation to find Oman's age.

(a)  $3x+5=44$

(c)  $3x-5=44$

(b)  $2x+5=77$

(d)  $2x-5=77$

25. Find a number, such that one fourth of the number is 3 more than 7.

(a) 20

(c) 30

(b) 40

(d) 50

26. Find the supplement of the following angle:



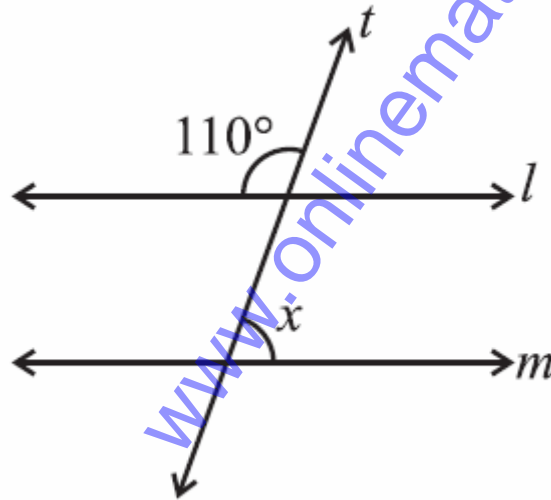
(a)  $26^\circ$

(c)  $46^\circ$

(b)  $16^\circ$

(d)  $36^\circ$

27. Find the value of "x" in the following figure:



(a)  $26^\circ$

(c)  $70^\circ$

(b)  $76^\circ$

(d)  $80^\circ$

28. The lengths of two sides of a triangle are 6 cm and 8 cm. Between which two numbers can length of the third side fall?

(a) 2 and 14

(c) 16 and 21

(b) 18 and 24

(d) 7 and 11

29. ABC is right-angled at C. If AC = 5 cm and BC = 12 cm find the length of AB.

(a) 84 cm

(c) 40 cm

(b) 32 cm

(d) 13 cm

30. A 15 m long ladder reached a window 12 m high from the ground on placing it against a wall at a distance  $a$ . Find the distance of the foot of the ladder from the wall.

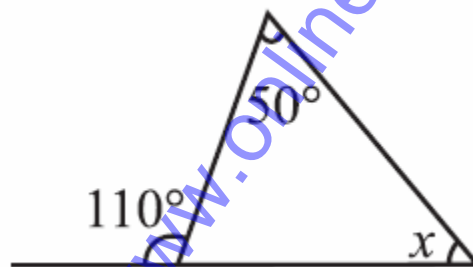
(a) 16 m

(c) 4 m

(b) 9 m

(d) 3 m

31. Find the angle "x" in the following figure.



(a)  $60^\circ$

(c)  $70^\circ$

(b)  $50^\circ$

(d)  $80^\circ$

32. A map is given with a scale of  $2 \text{ cm} = 1000 \text{ km}$ . What is the actual distance between the two places in kms, if the distance in the map is  $2.5 \text{ cm}$ ?

(a) 1250 km

(c) 850 km

(b) 1750 km

(d) 650 km

33. If \$250 is to be divided amongst Mark, Jack and Roy, so that Mark gets two parts, Jack three parts and Roy five parts. How much money will each get?

(a) 30, 40, 50

(c) 50, 75, 125

(b) 35, 45, 65

(d) 65, 50, 115

34. John walks  $\frac{2}{3} \text{ km}$  from a place P towards east and then from there  $\frac{12}{7} \text{ km}$  towards west. Where will he be now from P?

(a)  $\frac{22}{21} \text{ km}$  towards west of P

(b)  $\frac{22}{21} \text{ km}$  towards east of P

(c)  $\frac{22}{21} \text{ km}$  towards north of P

(d)  $\frac{22}{21} \text{ km}$  towards south of P

35. A door-frame of dimensions  $3\text{ m} \times 2\text{ m}$  is fixed on the wall of dimension  $10\text{ m} \times 10\text{ m}$ . Find the total labor charges for painting the wall if the labor charges for painting  $1\text{ m}^2$  of the wall is \$2.50.

(a) \$235

(c) \$335

(b) \$450

(d) \$520

36. The radius of a circular pipe is  $10\text{ cm}$ . What length of a tape is required to wrap once around the pipe?

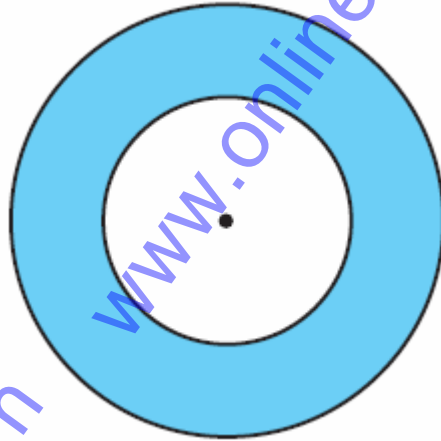
(a)  $42.3\text{ cm}$

(c)  $21.3\text{ cm}$

(b)  $34.2\text{ cm}$

(d)  $62.8\text{ cm}$

37. The figure shows two circles with the same centre. The radius of the larger circle is 10 cm and the radius of the smaller circle is 4 cm. Find the shaded area between the two circles.



(a)  $261.76 \text{ cm}^2$

(c)  $263.76 \text{ cm}^2$

(b)  $262.76 \text{ cm}^2$

(d)  $264.76 \text{ cm}^2$

38. A rectangular park is 45 m long and 30 m wide. A path 2.5 m wide is constructed outside the park. Find the area of the path.

(a)  $900 \text{ m}^2$

(c)  $400 \text{ m}^2$

(b)  $600 \text{ m}^2$

(d)  $200 \text{ m}^2$

39. Two cross roads, each of width 5 m, run at right angles through the centre of a rectangular park of length 70 m and breadth 45 m and parallel to its sides. Find the area of the roads. Also find the cost of constructing the roads at the rate of \$105 per  $\text{m}^2$ .

(a)  $550 \text{ m}^2$ , \$57750

(c)  $750 \text{ m}^2$ , \$57750

(b)  $650 \text{ m}^2$ , \$57750

(d)  $850 \text{ m}^2$ , \$57750

40. Express the following number as a product of powers of prime factors:

16000

(a)  $2^8 \times 5^3$

(c)  $2^7 \times 5^3$

(b)  $2^6 \times 5^3$

(d)  $2^5 \times 5^3$

41. Simplify the following:

$$\frac{12^4 \times 9^3 \times 4}{6^3 \times 8^2 \times 27}$$

(a) 162

(c) 172

(b) 132

(d) 142

42. Express the number appearing in the following statements in standard form.

*The distance between Earth and Moon is 384,000,000 m.*

(a)  $3.84 \times 10^8$  m

(c)  $2.84 \times 10^8$  m

(b)  $1.84 \times 10^8$  m

(d)  $4.84 \times 10^8$  m

43. How many even prime numbers are there?

(a) 0

(c) 1

(b) 5

(d) 6

44. What is the value of  $\frac{(-1)+(-3)}{(+1)-(+5)}$

(a) 2

(c) 4

(b) 1

(d) -4



45. When two coins are tossed, what is the chance for getting four heads?

(a) 3

(c) 2

(b) 1

(d) 0

46. Find the sum of the following:

$$21+22+23+\dots\dots\dots+50$$

(a) 1065

(c) 1225

(b) 1555

(d) 1755

47. 1, 8, 27, ..... what is the next term in this sequence?

(a) 56

(c) 64

(b) 55

(d) 61

48. Given  $x+y=2$ ,  $x-y=0$ . Solve for "x" and "y".

(a)  $X=1, Y=2$

(c)  $X=1, Y=-1$

(b)  $X=1, Y=1$

(d)  $X=1, Y=0$

49. The difference between the place values of 7 and 3 in the number 527435 is

(a) 6970

(c) 6870

(b) 6770

(d) 6670

50. What least number must be subtracted from 2000 to get a number exactly divisible by 17?

(a) 8

(c) 10

(b) 9

(d) 11

Answers:

- |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| 1. c  | 2. a  | 3. a  | 4. b  | 5. a  | 6. c  |
| 7. c  | 8. a  | 9. d  | 10. c | 11. a | 12. b |
| 13. d | 14. c | 15. a | 16. b | 17. c | 18. a |
| 19. d | 20. c | 21. b | 22. d | 23. c | 24. a |
| 25. b | 26. a | 27. c | 28. a | 29. d | 30. b |
| 31. a | 32. a | 33. c | 34. a | 35. a | 36. d |
| 37. c | 38. c | 39. a | 40. c | 41. a | 42. a |
| 43. c | 44. b | 45. d | 46. a | 47. c | 48. b |
| 49. a | 50. d |       |       |       |       |